



Section 1. Product and Company Identification

Product Name: SFE-220 – Part A
Supplier: CSNRI | 621 Lockhaven Drive. Houston, TX 77073 | +1 281.590.8491
Emergency Phone Number: 800.424.9300 (CHEMTREC)
 +1 703.741.5970 (Outside the US)
Product Description: Epoxy solution
Product Use: Intended to repair pipes

Section 2. Hazard Identification

Classification of the substance or mixture:

Skin corrosion/irritation - Category 2
 Eye damage/eye irritation - Category 2A
 Skin sensitization - Category 1
 Chronic Aquatic Toxicity - Category 2

Hazard pictograms:



Signal Word: Warning

Hazard Statements:

H315 Causes skin irritation
 H317 May cause an allergic skin reaction
 H319 Causes serious eye irritation
 H411 Toxic to aquatic life with long lasting effects

Precautionary Statement:

P273 Avoid release to the environment
 P280 Wear protective gloves/ protective clothing/ eye protection/ face protection
 P362 Take off contaminated clothing and wash before reuse
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
 P333 + P313 If skin irritation or rash occurs: get medical advice / attention.

Other hazards: None known.

Section 3. Composition/ Information on Ingredients

Substances: Not applicable

Mixture:

Chemical Name	CAS-No	Weight %
Phenol, polymer with formaldehyde, glycidyl ether	28064-14-4	65 – 80
Trimethylolpropane triglycidyl ether	30499-70-8	15 – 30

**Section 4. First Aid Measures****Description of first-aid measures:**

General advice: If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Inhalation Move to fresh air. If symptoms persist, call a physician.

Skin contact: Remove contaminated clothing. Wipe excess from skin. Lather with waterless skin cleaner and then wash with warm soap and water. If irritation occurs, get medical attention.

Eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses. Protect unharmed eye. If symptoms persist, call a physician.

Ingestion: Do not induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

Most important symptoms/effects, acute and delayed: None known.

Indication of immediate medical attention and special treatment needed: Treat symptomatically.

Section 5. Fire Fighting Measures

Suitable extinguishing media: Carbon dioxide, foam, dry chemical, water fog.

Unsuitable extinguishing media: High volume water jet.

Special hazards arising from the substance or mixture: No data is available.

Special protective actions for fire-fighters: Use water to keep fire exposed containers cool. Do not use high volume water jet on the fire as this may spread the area of the fire. Wear complete firefighting gear and self-contained breathing apparatus to protect against potential harmful and/or irritating fumes.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Isolate area. Keep unnecessary and unprotected personnel from entering the involved area. Avoid contact with eyes, skin and clothing. Use gloves and safety glasses.

For non-emergency personnel: Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid contact with eyes, skin and clothing. Use gloves and safety glasses.

For emergency responders: Use personal protective equipment. Wear self-contained breathing apparatus for firefighting if necessary.

Environmental precautions: Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. Avoid release to the environment

Methods and material for containment and cleaning up: Stop leak without additional risk. Dike and absorb with inert absorbent material (e.g., sand, silica gel, acid binder, universal binder, sawdust) and collect in a suitable, closed and labeled container. Dispose of in accordance with applicable local and federal environmental control regulations.



Section 7. Handling and Storage

Precautions for safe handling: Ventilate work area. Avoid skin contact. Skin contact with hot material may cause thermal burns. Wash skin thoroughly after handling. Launder contaminated clothing before reuse or discard. Never apply a direct flame to any container of product.

Conditions for safe storage including any incompatibilities: Store in a cool, dry place with adequate ventilation. Keep in original containers. Store in tightly closed containers to prevent moisture absorption and loss of volatiles. Store away from heat and open flame.

Section 8. Exposure Controls / Personal Protection

Control parameters: Contains no substances with occupational exposure limit values.

Appropriate engineering controls: Ventilation must be adequate for most operations.

Individual protection measures:

Eye / face protection: Wear safety glasses with side shields or chemical splash goggles when exposure is more likely.

Skin protection: Wear liquid-proof, chemical resistant gloves (nitrile-butyl rubber, neoprene, butyl rubber or natural rubber) and full body-covering clothing.

Respiratory protection: In case of inadequate ventilation wear respiratory protection. Use respirators when exposure to vapors from heated material.

Other information: Wash thoroughly after handling. Avoid breathing vapors from heated material. Protective skin cream barriers can be applied to hands in addition to gloves for added protection.

Section 9. Physical and Chemical Properties

Physical state:	Liquid
Color:	Blue
Odor:	Slight
Odor Threshold:	No data available
Melting Point Range:	No applicable
Boiling point:	> 245 °C
Flammability (solid, gas):	No data available
Flammability Limits in Air:	Not established for this product
Flash Point:	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available
pH:	≈ 7 at 20 °C
Viscosity:	≈ 32,000 cP at 25 °C (Method: Rheometer)
Water Solubility:	Insoluble
Solubility in other solvents:	Practically insoluble (25 °C)
Partition coefficient (n-octanol/water):	No data available
Vapor Pressure:	No data available
Density:	1.01 g/cm ³ at 25 °C
Vapor density (Air=1)	No data available
Evaporation rate (ether=1):	No data available

Section 10. Stability and Reactivity



Reactivity: No decomposition if stored and applied as directed

Chemical stability: Stable under standard normal conditions.

Possibility of hazardous reactions: None under normal processing.

Conditions to avoid: To avoid thermal decomposition, do not overheat. Incompatible products.

Incompatible materials: Acids. Bases. Strong acids. Strong oxidizing agents. Reacts with amines.

Hazardous decomposition products: Carbon oxides. Burning produces noxious and toxic fumes.

Section 11. Toxicological Information

Acute toxicity:

Product	Oral LD50	Dermal LD50	Inhalation
Phenol, polymer with formaldehyde, glycidyl ether	> 4,000 mg/kg (Rat)	> 2,000 mg/kg (Rabbit)	No data available
Trimethylolpropane triglycidyl ether	3,398 mg/kg (Rat)	3,170 mg/kg (Rat)	No data available

Skin corrosion/irritation: May cause skin irritation and / or dermatitis.

Serious eye damage / eye irritation: May cause eye irritation.

Skin sensitization: Causes allergic skin reaction.

Germ cell mutagenicity: Not classified based on available data.

Carcinogenicity: Not classified based on available data. Ingredients not listed by IARC, NTP, OSHA.

Reproductive toxicity: Not classified based on available data.

STOT- single exposure: Not classified based on available data.

STOT- repeated exposure: Not classified based on available data.

Aspiration Hazard: Not classified based on available data.

Potential Health Effect:

Skin: Causes mild skin irritation. May cause sensitization. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Eyes: Causes eye irritation; pain, irritation, watering, redness.

Ingestion: Low toxicity; incidental ingestion or small amounts not anticipated to be harmful.

Inhalation: Low volatility; not expected to be a significant route of exposure. May cause irritation of the respiratory tract and mucous membranes.

Information on the likely route of exposure: No information available.

Symptoms related to the physical, chemical and toxicological characteristics: No information available.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Short term exposure: No information available.

Long term exposure: No information available.

Section 12. Ecological Information

Toxicity effects: Toxic to aquatic life with long lasting effects.

Acute toxicity:



Chemical Name	Freshwater fish (LC50)	Daphnia / aquatic invertebrates (EC50)	Algae freshwater (EC 50)
Phenol-formaldehyde polymer, glycidyl ether	5.7 mg/L – 96h	3.5 mg/L – 48h	N/A
Trimethylolpropane triglycidyl ether	75 mg/L	3.7 mg/L	9.0 mg/L

Persistence and degradability: Not readily biodegradable

Bioaccumulative potential: No information available.

Mobility in soil: No information available.

Other adverse effects: No information available.

Section 13. Disposal Considerations

Waste treatment methods: Do not dump to ground, sewers or watercourses. Dispose of at a licensed waste disposal facility utilizing methods that are in compliance with all applicable federal, state and local laws regulations. Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator. Empty containers should be taken to an approved waste handling site for recycling or disposal.

Uncleaned packaging: Empty containers should be taken to an approved waste handling site for recycling or disposal.

Section 14. Transport Information

DOT: Not regulated as hazardous for transport by ground (U.S)

IATA

UN number: UN 3082
UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Phenol, polymer with formaldehyde, glycidyl ether)
Transport hazard class: Class 9
Packing group: III
EmS No: F-A, S-F
Environmental hazard: Marine pollutant
Packing instruction (cargo aircraft): 964

IMDG

UN number: UN 3082
UN proper shipping name: Environmentally hazardous substance, liquid, n.o.s. (Phenol, polymer with formaldehyde, glycidyl ether)
Transport hazard class: Class 9
Packing group: III
Environmental hazard: Marine pollutant
EMS number: F-A, S-F

Section 15. Regulatory Information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

**US federal regulations:**

SARA Title III Section 311/312 (40CFR370): Acute health hazard

SARA Title III Section 313 (40CFR372): No reportable components

CERCLA Status (40CFR302): No reportable quantity components

OSHA/NTP/IARC Carcinogen status: Not listed.

TSCA Status: All components are listed on TSCA Inventory or otherwise comply with TSCA requirements.

International regulations:

Canada DSL Status: Reported / Included

Canada WHMIS Classification: D2B

REACH Annex XIV: Not listed components.

REACH Annex XVII: Not listed components.

REACH Status (EC 1907/2006): The ingredients of this material are registered, pre-registered or is otherwise exempted from registration under the Registration, Evaluation and Authorization of Chemical Substances.

Section 16. Other Information**Further information:****NFPA:**

2 – Health

1 – Flammability

0 – Instability

Abbreviations and acronyms used:

CAS: Chemical Abstracts Service

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods

NIOSH: National Institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration

AICS: Australian Inventory of Chemical Substances

The information contained herein is based on the data available to us and is believed to be accurate. The data is offered in good faith as typical values and not as product specification. The information in this data sheet was compiled from information supplied by the vendors of the components of this compound. CSNRI makes no warranty either expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. The recommended industrial hygiene and safe handling procedures are believed to be genuinely applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are appropriate. CSNRI assumes no responsibility for injury from the use of the product described herein. The information is intended only to assist in the safe handling of this material. CSNRI DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR FREEDOM FROM PATENT INFRINGEMENT. CSNRI WILL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Date of issue: 03/25/2020

Revision date: 03/25/2020

Supersedes: Original

Version: 1.0